

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A method of providing device control to a plurality of device components, said device control enabling interaction of a data network service with said plurality of device components, said method comprising:

communicating with a plurality of stimulus device components using stimulus messaging in accordance with an elemental control protocol;

logically associating said plurality of device components in an aggregate logical device;

maintaining a logical model of said aggregate logical device wherein a state of each stimulus device component within said aggregate logical device is maintained; and

providing access to said data network service by representing said plurality of stimulus device components to said data network service as said aggregate logical device; and

wherein said representing further comprises,

encapsulating a message destined for a server of said data network service to result in an encapsulated message, and

sending said encapsulated message to at least one of said plurality of stimulus device components for forwarding to said server of said data network service.

2.- 3. (Canceled).

4. (Previously Presented) The method of claim 3 wherein said elemental control protocol is Megaco Protocol.
5. (Previously Presented) The method of claim 3 wherein said elemental control protocol is Session Initiation Protocol (SIP).
6. (Previously Presented) The method of claim 3 wherein said elemental control protocol is H.323 protocol.
7. (Original) The method of claim 1 wherein said maintaining said logical model further comprises dynamically adding a given device component to said logical model.
8. (Original) The method of claim 1 wherein said maintaining further comprises dynamically removing a given device component from said logical model.
9. (Previously Presented) The method of claim 1 wherein a server of said data network service is physically associated with at least one device component.
10. (Canceled)

11. (Original) The method of claim 1 wherein said data network service is a first data network service and wherein said providing comprises:

executing a first data network service adapter application corresponding to a server of said first data network service; and

logically associating said first data network service adapter application with said aggregate logical device.

12. (Previously Presented) The method of claim 11 further comprising:

providing access to a second data network service by representing said plurality of device components to said second data network service as said aggregate logical device; and

where said providing includes executing a second data network service adapter application corresponding to said server of said second data network service and logically associating said second data network service adapter application with said aggregate logical device.

13. (Previously Presented) The method of claim 12 further comprising routing, as necessary, said communicating with said plurality of device components to an appropriate one of either said first data network service adapter application of said second data network service adapter application.

14. (Original) The method of claim 12 wherein said providing comprises:

executing a compound data network service adapter application comprising a logical association of:

said first data network service adapter application corresponding to said server of said first data network service; and

a second data network service adapter application corresponding to said server of said server of said second data network service; and

logically associating said compound data network service adapter application with said aggregate logical advice.

15. (Original) The method of claim 14 wherein said server of said first data network service is functionally associated with said server of said second data network service.

16. (Currently Amended) The method of claim 11 wherein said representing further comprises: receiving an encapsulated message, containing including a message from a server of said data network service, from at least one of said plurality of device components; and

de-encapsulating said encapsulated message for forwarding to said first data network service adapter application.

17. (Previously Presented) The method of claim 12 further comprising enforcing visibility rules for mediating said communication with one of said plurality of device components as said

communication relates to said first data network service adapter application and said second data network service adapter application.

18. (Canceled)

19. (Previously Presented) The method of claim 1 wherein at least one of said plurality of stimulus device components is connected to a data network.

20. (Previously Presented) The method of claim 1 further comprising:

communicating with a second plurality of stimulus device components using stimulus messaging in accordance with the elemental control protocol;

logically associating the second plurality of stimulus device components in a second aggregate logical device; and

maintaining a second logical model of said second aggregate logical device.

21. (Previously Presented) The method of claim 20 further comprising providing access to said data network service by representing said second plurality of stimulus device components to said data network service as said second aggregate logical device.

22. (Previously Presented) The method of claim 20 further comprising providing access to a second data network service by representing said second plurality of stimulus device components to said second data network service as said second aggregate logical device.

23. (Previously Presented) The method of claim 1 wherein a given stimulus device component of said plurality of stimulus device components is a primary network intelligence for providing device control to further ones of said plurality of device components.

24. (Canceled)

25. (Previously Presented) The method of claim 24 wherein said elemental control protocol is Megaco Protocol.

26. (Previously Presented) The method of claim 23 wherein, upon loss of communication with said primary network intelligence, said method further comprises:

communicating with said further ones of said plurality of stimulus device components;

logically associating said further ones of said plurality of stimulus device components with one another as second aggregate logical device;

maintaining a second logical model of said second aggregate logical device; and

providing access to said data network service by representing said further ones of said plurality of stimulus device components to said data network service as said second aggregate logical device.

27. (Original) The method of claim 1 wherein said providing comprises:

converting an indication of a change in a state of said logical model of said aggregate logical device into a request of said data network service; and

sending said request to said data network service.

28. (Original) The method of claim 27 wherein said providing comprises:

receiving a response to said request of said data network service;

generating an interpretation of said response; and

providing instructions, based on said interpretation, to change said state of said logical model of said aggregate logical device.

29. (Previously Presented) The method of claim 28 wherein said response comprises a media flow and, responsive to said interpretation of said response, said communicating further comprises sending said media flow to a given device component of said plurality of stimulus device components.

30. (Previously Presented) The method of claim 29 wherein said generating said interpretation further comprises, before said sending, converting said media flow from a format in which said media flow was received to a format understood by said given stimulus device component of said plurality of stimulus device components.

31. (Previously Presented) The method of claim 28 wherein said response comprises a data file and, responsive to said interpretation of said response, and communicating further comprises sending said data file to a given stimulus device component of said plurality of stimulus device components.

32. (Previously Presented) The method of claim 31 wherein said generating said interpretation further comprises, before said sending, converting said data from a format in which said data file was received to a format understood by said given stimulus device component of said plurality of stimulus device components.

33. (Previously Presented) The method of claim 27 wherein sending said request to said data network service further comprises instructing said data network service to direct a response to a given stimulus device component of said plurality of stimulus device components.

34. (Previously Presented) The method of claim 1 wherein said aggregate logical device comprises a logical device element corresponding to each of said plurality of stimulus device



components and wherein a given logical device element corresponds to a particular stimulus device component and a device type of said given logical device element is different from a device type of said particular stimulus device component.

35. (Previously Presented) The method of claim 34 wherein said device type of said logical device element is "pointing device" and said device type of said particular stimulus device component is "microphone".

36. (Original) The method of claim 35 further comprising using speech recognition to convert a message received from said "microphone" device type to a state change of said "pointing device" device type.

37. (Currently Amended) A network intelligence for providing device control to a plurality of device components, said network intelligence comprising:

a message driver for communicating with a plurality of stimulus device components using stimulus messaging in accordance with an elemental control protocol;

a resource context manager for:

logically associating said plurality of stimulus device components in an aggregate logical device;

maintaining a logical model of said aggregate logical device wherein a state of each stimulus device component within said aggregate logical device is maintained; and

a service adapter for representing said plurality of stimulus device components to said data network service as said aggregate logical device to provide access to said data network service, and

wherein said representing further comprises,

receiving an encapsulated message, including a message from a server of said data network service, from at least one of said plurality of stimulus device components, and

de-encapsulating said encapsulated message for forwarding to said first data network service adapter application.

38. (Currently Amended) A computer readable medium containing computer-executable instructions which, when performed by a processor in a network intelligence for providing device control to a plurality of device components, cause the processor to:

communicate with a plurality of stimulus device components using stimulus messaging in accordance with an elemental control protocol;

logically associate said plurality of stimulus device components in an aggregate logical device;

maintain a logical model of said aggregate logical device wherein a state of each stimulus device component within said aggregate logical device is maintained;

represent said plurality of stimulus device components to said data network service as said aggregate logical device to provide access to said data network service, and

wherein said represent further comprises,

receive an encapsulated message, including a message from a server of said data network service, from at least one of said plurality of stimulus device components, and

de-encapsulate said encapsulated message for forwarding to said first data network service adapter application.

39. - 43. (Canceled).

44. (Currently Amended) A method of providing device control to at least one device component, said device control enabling interaction of a stand-alone service with said at least one device component, said method comprising:

communicating with said at least one stimulus device component using stimulus messaging in accordance with an elemental control protocol;

logically associating a plurality of device components in an aggregate logical device, said plurality of stimulus device components comprising said at least one stimulus device component;

maintaining a logical model of said aggregate logical device wherein a state of each stimulus device component within said aggregate logical device is maintained; and

providing access to said stand-alone service by representing said plurality of stimulus device components to said stand-alone service as said aggregate logical device; and

wherein said representing further comprises,

encapsulating a message destined for a server of said data network service to result in an encapsulated message, and

sending said encapsulated message to at least one of said plurality of stimulus device components for forwarding to said server of said data network service.

45. (Currently Amended) A method of providing device control to at least one device component, said device control enabling interaction of a data network service with said at least one device component, and method comprising:

communicating with said at least one stimulus device component, wherein said communicating uses stimulus messaging in accordance with Session Initiation Protocol (SIP);

logically associating a plurality of stimulus device components in an aggregate logical device, said plurality of stimulus device components including said at least one stimulus device component;

maintaining a logical model of said aggregate logical device wherein a state of each stimulus device component within said aggregate logical device is maintained; and

providing access to said data network service by representing said plurality of stimulus device components to said data network service as said aggregate logical device; and

wherein said representing further comprises,

encapsulating a message destined for a server of said data network service to result in an encapsulated message, and

sending said encapsulated message to at least one of said plurality of stimulus device components for forwarding to said server of said data network service.

46. (Previously Presented) A method of providing device control to at least one device component, said device control enabling interaction of a data network service with said at least one device component, and method comprising:

communicating with said at least one stimulus device component using stimulus messaging in accordance with an elemental control protocol;

logically associating a plurality of stimulus device components in an aggregate logical device, said plurality of stimulus device components including said at least one stimulus device component;

maintaining a logical model of said aggregate logical device wherein a state of each stimulus device component within said aggregate logical device is maintained; and

providing access to said data network service by representing said plurality of stimulus device components to said data network service as said aggregate logical device, and said representing further comprises,

encapsulating a message destined for a server of said data network service to result in an encapsulated message, and

sending said encapsulated message to at least one of said plurality of stimulus device components for forwarding to said server of said data network service.

47. (Previously Presented) A method of providing device control to at least one device component, said device control enabling interaction of a data network service with said at least one device component, and method comprising:

communicating with said at least one stimulus device component using stimulus messaging in accordance with an elemental control protocol;

logically associating a plurality of stimulus device components in an aggregate logical device, said plurality of stimulus device components including said at least one stimulus device component;

maintaining a logical model of said aggregate logical device wherein a state of each stimulus device component within said aggregate logical device is maintained; and

providing access to said data network service by representing said plurality of stimulus device components to said data network service as said aggregate logical device;

wherein said data network service is a first data network service;

wherein said providing further comprises,

executing a first data network service adapter application corresponding to a server of said first data network service, and

logically associating said first data network service adapter application with said aggregate logical device; and

wherein said representing further comprises,

receiving an encapsulated message, containing a message from a server of said data network service, from at least one of said plurality of stimulus device components, and

de-encapsulating said encapsulated message for forwarding to said first data network service adapter application.